



Universidade do Minho

Documentos de Trabalho
Working Paper Series

**“A value-based approach to business model
innovation: Defining the elements of the concept”**

Arash Rezazadeh
Ana Carvalho

NIPE WP 12/ 2018

NÚCLEO DE INVESTIGAÇÃO EM POLÍTICAS ECONÓMICAS
UNIVERSIDADE DO MINHO

“A value-based approach to business model innovation: Defining the elements of the concept”

Arash Rezazadeh
Ana Carvalho

NIPE* W12/2018

URL:

<http://www.nipe.eeg.uminho.pt/>



«This work was carried out within the funding with COMPETE reference nº POCI-01-0145-FEDER-006683 (UID/ECO/03182/2013), with the FCT/MEC's (Fundação para a Ciência e a Tecnologia, I.P.) financial support through national funding and by the ERDF through the Operational Programme on "Competitiveness and Internationalization – COMPETE 2020 under the PT2020 Partnership Agreement»

A value-based approach to business model innovation: Defining the elements of the concept

Arash Rezazadeh ^a, Ana Carvalho ^b

School of Economics and Management and NIPE, University of Minho, Braga, Portugal

^a Corresponding author: a.rezazadeh@eeg.uminho.pt

^b anac@eeg.uminho.pt

Acknowledgements

This work was carried out within the funding with COMPETE reference nº POCI-01-0145-FEDER-006683, with the FCT/MEC's (Fundação para a Ciência e a Tecnologia, I.P.) financial support through national funding and by the ERDF through the Operational Programme on "Competitiveness and Internationalization – COMPETE 2020 under the PT2020 Partnership Agreement.

A value-based approach to business model innovation; defining the elements of the concept

Business model innovation (BMI) has increasingly attracted attention by proposing the business model (BM) as a new unit of analysis in the study of innovation. However, the definition and dimensioning of the concept is still unclear. This paper thereby aims to identify a consistent set of interdependent BMI elements, aligning with a configurational approach. Taking a value-based perspective, we review the existing contributions to date and arrive at five elements of BMI, each focused on one facet of the company's BM: (1) value creation innovation; (2) value proposition innovation; (3) value delivery innovation; (4) value capture innovation; and (5) value network innovation. This study contributes to the growing BMI literature by proposing a unique classification underpinned by a value-grounded theory of the firm. Furthermore, we describe how these five dimensions interact and explore its implications. Throughout, we illustrate our ideas with the examples of existing companies.

Keywords: business model; business model innovation; value-based perspective; configurational approach

JEL classifications: O31; L10; L20; L26; M10

1. Introduction

Given that the concept of business model (BM) emerged from the information systems literature, business management scholars still discuss the need for further investigation of its conceptualisation, elements, and processes involved (Teece 2010; Spieth, Schneckenberg, and Ricart 2014; Foss and Saebi 2017). Business model innovation (BMI) is one of the products of proposing BM as a new unit of analysis in the study of innovation. Ever since the success of some prominent companies in innovating their BM came under close scrutiny (e.g., IBM when it embarked on service delivery projects while maintaining its hardware production systems), there has been a growing interest in exploring the reasons why some BMI efforts achieve spectacular results while others encounter failures. As specifically noted in the literature (Cavalcante, Kesting, and Ulhøi 2011; Koen, Bertels, and Elsum 2011), one of the major

reasons for BMI failure is a lack of precise knowledge about different BMI elements and more importantly, which certain aspects of BMI is more likely to result in optimum function regarding different internal and external contingencies.

This paper responds to calls for a deeper understanding about the conceptualisation and dimensioning of the BMI concept. As stated by Schneider and Spieth (2013, 23), ‘business model innovation's core elements and the process of their identification, design, and evaluation remain largely unknown’. Foss and Saebi (2017) also identify one of the remaining gaps in the domain as ‘defining and dimensionalising the BMI construct’ (215). Thereupon, this study aims to propose an integrated framework to incorporate the different ways of reshaping the BM. Bringing together disparate contributions in the literature along the value-based perspective (Brandenburger and Stuart, 1996), we have tried to identify the major components of BMI along this view and consider its dynamic nature by exploring the interconnections among the five value-based elements.

We begin by reviewing background knowledge about the BM concept. This is supported by the notion that successful innovation in a firm’s BM requires a thorough insight into its underpinnings and implications (Chesbrough 2007). Loosely defined, BM refers to a conceptual tool describing the way in which the company does business. Deeper definitions of BM diverge regarding different sets of its elements proposed by scholars. One of the reasons for the divergence can be the use of different perspectives. The value-based perspective, in particular, is of advantage as it ‘presents all the value aspects of BMs, enabling an exhaustive overview of the levers of business model innovation’. BMI, in general terms, is defined as the practice of innovating the firm’s current BM. It can be recognised either as the process of changing the whole logic of doing business (radical BMI), or the practice of changing one or more elements of the firm’s BM (incremental BMI).

This article is organised as follows. First, a chronology of the theoretical development of both BM and BMI is prepared, highlighting the most important theorising attempts with reference to important studies as milestones. Then, after outlining the more frequently cited elements of BM in the literature, the resulting set of BMI components anchored in the value-based perspective is explained. The proposed BMI framework is also detailed, presenting the stories of companies as illustrating examples and examining the interactional effects among the identified BMI components. Finally, in the concluding section, some suggestions for future research are set out.

2. Theoretical backgrounds

2.1. Business model

The origins of the BM topic can be traced back to the advent of e-commerce in the mid-1990s, when some companies found it beneficial to change their business logic by doing away with physical stores and selling products online. The web therefore was conceived as a means of changing traditional BMs and the term ‘business model’ was coined in both academic and industrial settings as a result of the meteoric growth of Internet-based businesses.

Accordingly, the theoretical evolution of the BM subject originates in the e-business literature. The work of Timmers (1998) is one of the earliest studies in the field shedding light on a number of different BMs that Internet-based enterprises can implement. Providing practical examples of companies employing those BMs, Timmers comes up with a framework of BM classification. The elaboration of frameworks and models to better understand the concept of BM was a prevailing approach in early scholarship (e.g., Mahadevan 2000; Amit and Zott 2001). Despite receiving attention from academia, the domain was only addressed in the e-business literature restricting BM conceptualisation to the use of the Internet per se. The next generation of authors however extended the field into other areas, deepening and widening

the enquiry into BM. Magretta (2002), as one of the earliest enquirers, suggested a broader implication of a firm's BM as a means to have a sounder understanding of customers and their demands, cost/revenue architecture, and value delivery mechanisms. After triggering off this broader conceptualisation, the field began to expand by receiving more attention from other disciplines such as logistics management (Chapman, Soosay, and Kandampully 2003), economics (Chung, Yam, and Chan 2004), or even social science (Seelos and Mair 2005). A dominant feature of cultivating the theoretical underpinnings of the BM concept, exemplified in these studies, was the use of illustrations and examples of companies adopting different BMs.

Osterwalder (2004, 2005) played an important role in the formulation of an ontology, according to which a well-designed BM should address four areas: products/services, customers, internal mechanisms, and financial matters. As sub-indicators of these four dimensions, he proposed nine components for BM, which are still recognised as essential building blocks of BM: value proposition (the company's offerings to customers), targeted customers, distribution channels, customer relationship management, value configuration (the integration of resources with processes), key capabilities required for thorough execution of tasks, the network of partners, cost model, and revenue streams. Inspired by this ontology, the next stream of BM research placed more emphasis on components, typologies, and taxonomies. The article of Morris, Schindehutte, and Allen (2005) is one of the earliest, most frequently cited publications in the area proposing six elements of BM, each focused on six major concerns of a firm, viz. offerings, customers, sources of competence, positioning, revenue model, and the owner(s)/manager(s).

Along these theoretical advancements, several new, still persuasive topics emerged such as the notion of *hybrid* or *parallel* BMs (Bonaccorsi, Giannangeli, and Rossi 2006), highlighting the advantages of functioning under two or more BMs that enables the firm to

shift from current strategies and practices to new ones. This idea developed later into the concept of *BM ambidexterity* (the ability to manage two different and conflicting BMs concurrently), that is conceived as a synthesis of the literatures on organisational ambidexterity and BM (Markides 2013). Some of the emergent phenomena derived from studying BM through different lenses. For instance, BM design (Zott and Amit 2007), that addresses how to configure BM elements in order to yield extraordinary results, has attracted a great deal of attention from design thinking scholars. Business model innovation (BMI) is another fascinating subject of study, emerged initially from the effort of Chesbrough (2007) with the aim of raising the awareness of the equal importance of softer (non-technological) types of innovation (in this case, BMI). Another major advance in this period of time was the appearance of empirical studies examining the proposed BM theories. Zott and Amit (2008), for example, investigate the fit theory in the BM context and empirically confirm the hypothesis that the implementation of new BMs positively influences firms' performance.

BM theories still occupy the attention of scholars and notable conceptual articles have been published in recent literature. The study of Casadesus-Masanell and Ricart (2010) is one of those publications that provides a better explanation of BM by distinguishing it from strategy since these two concepts have previously been treated as one. Using concrete examples in the telecommunication and airline industries, the authors argue that strategy - in a higher level - determines which BM is best for a firm to implement, whilst BM - in a more specific account - explains the way of achieving the company's objectives.

The 2010s' decade of research on BM begins with the phenomenal work of Teece (2010) hinting at a fresh theoretical perspective of how the concept of BM is connected to the firm strategy and innovation success. Supplementing the literature with genuine theoretical insights on the BM design elements, BM sustainability, and provisional BMs, the author conveys the message that a successful integration of these three factors is essential for the

success of BMI implementation. Another important academic endeavour in the early 2010s is the study of Zott and Amit (2010) that stresses the need to regard BM design as a key managerial skill. Presenting an activity-based framework for effective design of the firm's BM, the authors introduce two main parameters, viz. the design elements (content, structure, and governance of activities), and the design themes (novelty, lock-in, complementarities, and efficiency of activities).

The BM literature continues to grow in the mid-2010s by two sources of contributions: one from the mainstream BM scholarship, trying to delineate the theoretical foundations of the field, and the other from environmental research and practice introducing the idea of *sustainable BMs*. In case of the former, some publications are worth noticing. Baden-Fuller and Mangematin (2013) criticise the lack of theoretically coherent typologies in the BM literature that is replete with repetitious taxonomies of observed cases. They propose a BM typology based upon the dimensions of customers, internal mechanisms, and monetisation strategies. DaSilva and Trkman (2014), in turn, attempt to expose the misuse and misinterpretation of the BM conceptualisation by distinguishing it from comparable concepts, such as strategy or cost-revenue model. Based on their view, the BM concept is a short-term perspective, describing the current configuration of business processes, compared to dynamic capabilities or strategy, which concern longer-term directions of the firm. The second stream of BM studies focuses on performance sustainability, representing the idea that sustainable developments should be based on key changes in the BM (Boons and Lüdeke-Freund 2013).

More recent studies on BM are dispersed across multiple areas and there is only fragmentary knowledge suggesting the future directions of the domain (Wirtz et al. 2016). It can be, however, remarked that BMI has become one of the major divisions of the BM domain in recent years (Foss and Saebi 2017). Figure 1 depicts a chronology of BM theoretical progression with reference to important studies as milestones.

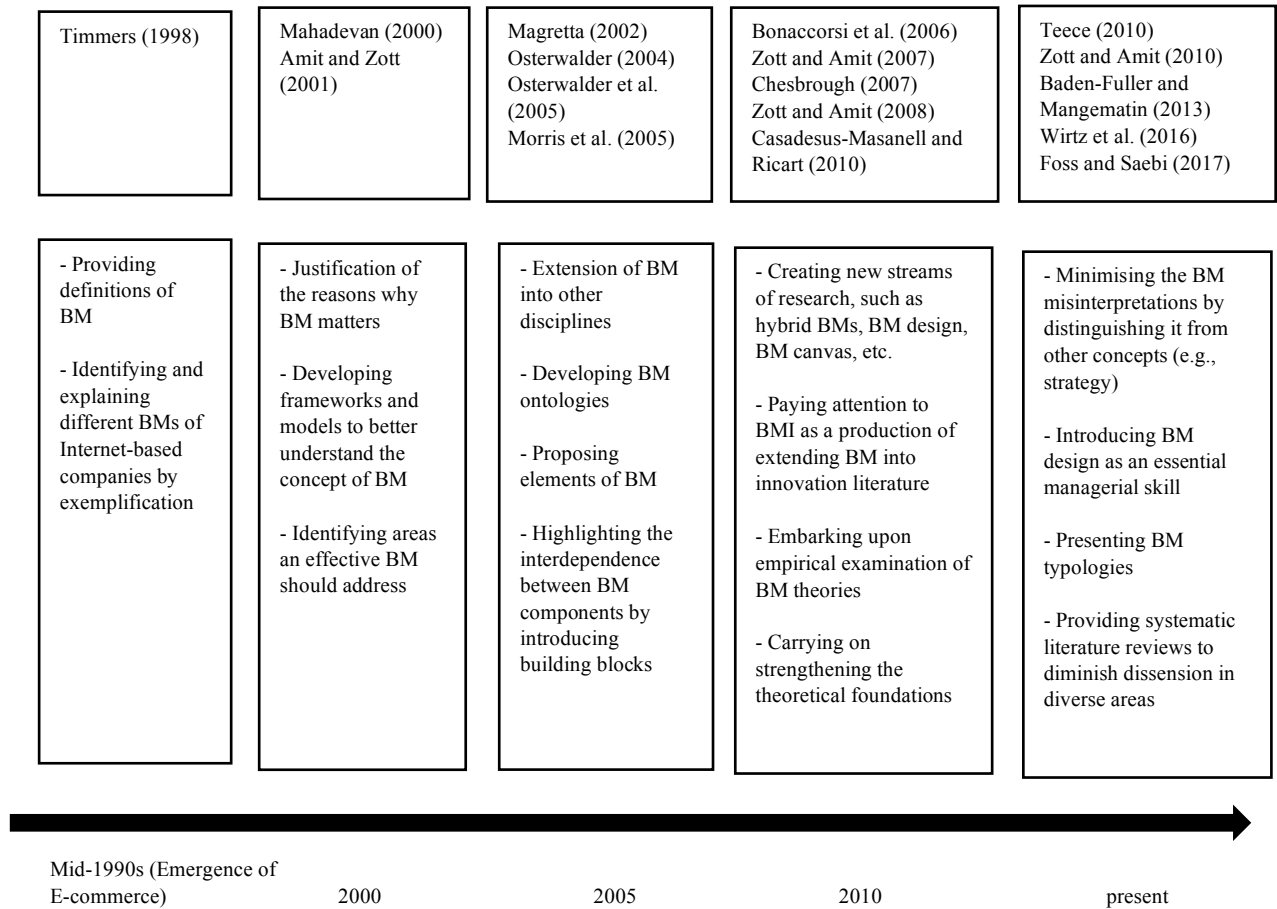


Figure 1. Theoretical evolution of the concept of BM

Looking at the existing definitions of BM, it becomes clear that no concrete consensus has yet been achieved (Arbussa, Bikfalvi, and Marquès 2017). Nevertheless, either stated explicitly (e.g., Casadesus-Masanell and Ricart 2010; Teece 2010) or implied within the text (e.g., Chesbrough and Rosenbloom 2002), most, if not all, of the previous studies agree that BM is a conceptual tool that describes how a firm does business and creates value for its stakeholders. We believe that the predominant reason for any remaining dissension pertains to the BM elements or components. These have advanced into building-blocks in later studies, appreciating the underlying assumption that the elements of a firm's BM are central pillars of its value chain that must be in sync with each other and without one, the whole system fails.

2.2. Business model building-blocks

As noted earlier, the specification of the elements of the concept of BM is of key importance not only for its definition, but also in making the concept distinct from similar concepts. As such, various building-blocks of BM have been identified to date and the difference between the classifications stems from adopting different approaches or perspectives. To specify the essential components of a BM, emphasis has been laid upon various aspects, such as value chain elements (Timmers 1998), core organisational processes (Cavalcante, Kesting, and Ulhøi 2011), BM functions (Chesbrough 2007), or BM design elements (Zott and Amit 2007; Teece 2010). The nine BM building-blocks introduced by Osterwalder and Pigneur (2010) as BM canvas components are perhaps the best known, most widely cited elements: customer segments, value propositions, distribution channels, customer relationships, key resources, activities, and partnerships, and cost and revenue models. The problem with this element specification method, in our view, is the lack of a solid theoretical grounding by which not only the interconnections between the elements are more likely to be covered, but also a more comprehensive inclusion of BM-determining factors is achievable. This is in line with the *configurational approach* which takes into detailed consideration both the interrelationships between several attributes of a construct and the holistic essence of organisational concepts (Meyer, Tsui, and Hinings 1993).

From the perspectives already taken to incorporate different elements into the design of BM, we find the value-based perspective (Ghezzi, Cortimiglia, and Frank 2015; Rayna and Striukova 2016) consistent with the configurational approach as it is anchored in the importance of *value* within the organisational structure of the firm. Taking this view, various authors have proposed different elements as comprising the BM concept, including three or four components. Four elements of BM are more frequently forwarded and regarded as essential. *Value creation* refers to the set of key internal resources, capitals, mechanisms, and activities by which a firm creates value for its stakeholders, including customers, suppliers,

employees, and other business partners (Morgan, Feller, and Finnegan 2013; Ghezzi, Cortimiglia, and Frank 2015). The *value proposition* element, which reflects anything that makes a firm attractive to its customers, mostly describes the products or services offered to the customers (Chesbrough and Rosenbloom 2002). Several aspects captured by this element are identified in the literature, in terms of newness, customisation, brand, design, price, accessibility, and usability (Osterwalder and Pigneur 2010). *Value delivery* explains the way a firm reaches and interacts with its customers. And finally, *value capture* articulates the way a firm deals with its financial issues to gain maximum profits (Baldassarre et al. 2017). Another building-block of BM that we add to the four mentioned factors is the *value network*, pertaining to the way a firm manages its partnership arrangements. Although this element, in some studies, is embedded in other dimensions of BM, such as in value delivery (Ghezzi, Cortimiglia, and Frank 2015), value creation (Richter 2013; Clauss 2016), or value capture (Bourreau, Gensollen, and Moreau 2012), we believe in the relevance of taking it as a separate element of BM, appreciating the fundamental role of inter-firm collaboration strategies in sustaining competitive advantages (Sainio et al. 2011; Dellyana, Simatupang, and Dhewanto 2016).

Table 1 below is a synopsis of studies proposing various BM components. It also points to the value-based elements implied by each study. As can be ascertained from this table, even though the BM sides with the conceptual, rather than financial representation of the business (Teece 2010), the cost-revenue architecture of the firm (reflected in the value capture element) has still been recognised as one of the central components. Another noteworthy point learned from Table 1 is the fact that none of these landmark studies consider all of the proposed five value-based BM elements together, nor do they explore the way they interplay with each other, which is one of the contributions of the current study.

Table 1. Business model building-blocks (ordered chronologically)

Study	Specified BM building-blocks	Value creation	Value proposition	Value delivery	Value capture	Value network
Amit and Zott (2001)	Value creation; opportunity exploitation; financial transactions	×			×	
Dubosson-Torbay, Osterwalder, and Pigneur (2002)	Products/services offered to the customers; customer relationship management; partnership infrastructure; financial aspects		×	×	×	×
Morris, Schindehutte, and Allen (2005)	Firm's offerings factors; market factors; internal capability factors; competitive strategy factors; economic factors; personal/investor factors	×	×		×	
Chesbrough (2007)	Value proposition; market segmentation; value chain structure; financial model (revenue, cost, and profit); network positioning; competitive strategy formulation		×	×	×	×
Teece (2010)	Product/service design; customer interface; market segmentation; revenue streams; value capture mechanisms		×	×	×	
Demil and Lecocq (2010)	Resources and competences; organisational system; value propositions; and cost-revenue structures	×	×		×	
Sainio et al. (2011)	Value creation driver; design elements; value exchange (with partners and customers)	×				×
Baden-Fuller and Mangematin (2013)	Customer identification; customer engagement; monetisation; value chain mechanisms	×		×	×	
Richter (2013)	Value proposition; customer interface; infrastructure; revenue model	×	×	×	×	
Taran, Boer, and Lindgren (2015)	Value creation; value delivery; revenue generation model; competitive positioning	×		×	×	
Gebauer, Haldimann, and Saul (2017)	Value proposition; value creation; profit equation	×	×		×	
Arbussa, Bikfalvi, and Marquès (2017)	Value proposition; value chain; cost, revenue, and profit efficiency		×	×	×	

2.3. Business model innovation (BMI)

BMI, in conventional terms, is defined as the practice of innovating the firm's current BM. Developing around this general appreciation, a number of definitions of BMI have been offered such as the early one by Casadesus-Masanell and Zhu (2013, 464): 'the search for new logics of the firm and new ways to create and capture value for its stakeholders'. Some definitions now seem incomplete, concentrated only on certain dimensions, such as the value capture: 'BMI refers to activities that considerably change the structure and/or financial model of a business' (Eshun Jr 2009, 163). Another point of inconsistency in BMI definitions is the radical vs. incremental distinction. Some scholars regard BMI as a radical, disruptive kind of

innovation: ‘the discovery of a fundamentally different business model in an existing business’ , ‘the process by which management actively innovates the business model to disrupt market conditions’ (Saebi, Lien, and Foss in press, 3). By contrast, a body of scholars appreciate more the incremental nature of BMI by defining it as the practice of changing one or more elements of the firm’s BM (e.g., Sorescu et al. 2011; Frankenberger et al. 2013), rather than changing the whole logic of doing business.

As mentioned earlier in the presented chronology of BM’s theoretical development, from 2010 onwards, there has been a surge in BMI studies as scholars find it interesting to explore how an existing company can innovate its current BM. The topic of BMI became prominent as a result of arguments put forth by two schools of thought. First, BM scholars came to the conclusion that a successful BM which is not novel cannot ensure the firm’s inimitable and sustainable competitive advantages (Teece 2010). Additionally, the innovation literature was provided by new proposed frameworks (e.g., Dervitsiotis 2010) hinting at soft (non-technological) types of innovation, such as the BMI.

Various perspectives have been taken to examine BMI, such as the organisational learning (Sosna, Trevinyo-Rodríguez, and Velamuri 2010; Berends et al. 2016) or the network-based view (Lindgren, Taran, and Boer 2010; Dellyana, Simatupang, and Dhewanto 2016). BMI literature owes much to the seminal work of Chesbrough (2010) which deftly argues that other types of innovation, such as technological or product innovations, are of a substantially lower value if a new supporting BM fails to be adopted.

This primary stage of BMI theoretical development was followed by some influential studies. The integration of BMI and sustainability values has been taken up in the energy and environmental literature. Richter (2013) concludes that utility providing companies will need to opt for BMI in order to tackle the challenge of renewable energy sources. The publication of Baden-Fuller and Haefliger (2013) is important as it explores how the choice of BM can

affect the success of technological innovation. As they argue, the firm's BM is a key determining factor in capturing financial value from deploying a new technology. Therefore, introducing new technology requires adjustments (either in the new technology, or the BM, or both) so that technology and BM are aligned in order to produce the desirable effects.

The evolution of the concept of BMI has been ongoing as different approaches are being adopted to extend the field. The use of the *cognitive* approach is remarkable as it incorporates the insights from psychology and strategy research to explain how BMs can be innovated proactively (Demil et al. 2015). Martins, Rindova, and Greenbaum (2015) propose two cognitive processes, viz. analogical reasoning and conceptual combination that analyse the BMI process in four stages of identification, comparison, integration, and modification.

There has also been a recent interest in studying the relationship between BMI and sustainability. Introducing the idea of sustainability-oriented BMI practices, Schaltegger, Lüdeke-Freund, and Hansen (2012) find it fulfilling to synthesise social and environmental factors with processes involved in a firm's BM. Business case drivers (e.g., cost or risk reduction) identified by their work ably reinforce the proposition that a company's new BM is more likely to be sustainable if social or environmental concerns (such as green practices) are met. Carayannis, Sindakis, and Walter (2015), in turn, focus on the ways in which BMI can lead to organisational sustainability, arguing that the successful implementation of BMI provides new organisational design and governance that incorporate an effective reconfiguration of key resources, activities, capabilities, and entrepreneurship, to generate sustained competitive advantages to the firm. In a similar vein, recently, there has been a growing interest in unlocking the practical values of BMI implementation by taking the circular economy view to emphasise the importance of regenerative and resilient systems of value creation. This has resulted in the introduction of the idea of *circular BMI* bringing to the fore

the importance of environmental impact in the design and implementation of new BMs (Linder and Williander 2017).

BMI systematic literature review efforts are in a state of flux to generate more insights about the definition, conceptualisation, and operationalisation of the concept, as well as its implications to other domains. The work of Spieth, Schneckenberg, and Ricart (2014) is one such well-known effort identifying three prevailing BMI perspectives based on the three different roles a BM can fulfil: explaining the business, running the business, and developing the business. Building upon these three lenses, they further outline inherent challenges in studying BMI and future research streams. More recently, the work of Foss and Saebi (2017) provides a systematic literature review on 15 years of BMI publications (from 2000 to 2015). Streams of BMI research, gaps and challenges in advancing the field, and future directions in BMI research are discussed by the authors. In particular, one of the gaps issued by the authors is the dimensioning of the BMI construct, so as to provide clarity not only about the elements of the concept, but also the *architecture* (interdependencies among the components), a feature that has been highlighted by previous theoretical analysis (c.f., Schneider and Spieth 2013; Spieth, Schneckenberg, and Ricart 2014). In addition, the radical vs. incremental character of BMI also remain contentious (Witell and Löfgren 2013).

Anchored in the value-based perspective, carrying on the BM building-blocks and siding with the incremental view of BMI, we define BMI as the practices by which the firm devises novel ways to create, propose, deliver, and capture value and also to innovate its partnerships arrangements. In this sense, BMI involves the reconfiguration of certain BM components, putting more weight on changing particular aspects of the value chain, but not necessarily all of them to the same extent and at the same time. Moreover, the configurational nature of BMI is underscored. We therefore see the different elements of BMI as interdependent and explore how they interact with each other.

3. A value-based framework of BMI

To approach the challenge of covering the key components of BMI, we find the *value-based perspective* particularly practicable as it features all the value aspects of BM and consequently paves the way to articulating BMI elements. Explicit implications of this perspective on BMI conceptualisation are stressed in the literature: a ‘value-based view of a business model can provide insight into potential areas for business model innovation’ (Rayna and Striukova 2016, 21). The value-based business strategy, introduced by Brandenburger and Stuart (1996), has been employed in BMI literature (Zott and Amit 2007; Gambardella and McGahan 2010) to elucidate the exact meaning of value in the BM context. Figure 2 represents the value created by a vertical value chain of suppliers, incumbent firms and end customers, according to Brandenburger and Stuart (1996). Value is here formulated as the difference between ‘the willingness-to-pay’ of the buyers (the maximum amount of money a buyer is willing to pay for a product or service) and the suppliers’ ‘opportunity costs’ (losses caused by allocating resources to the firm).

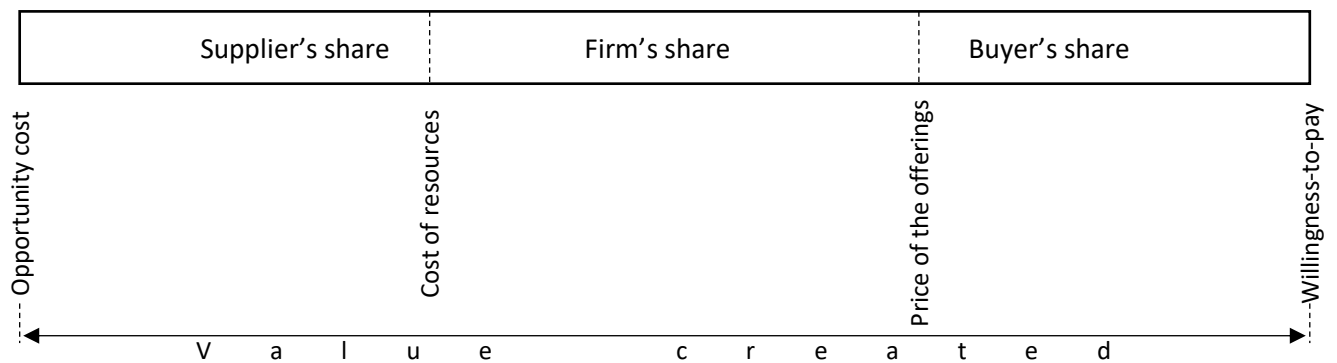


Figure 2. Understanding value creation and capture from the value-based perspective (adopted from Brandenburger and Stuart (1996))

Key to this perspective is the notion of ‘added value’. The value added by each player is ‘the value created by all the players in the vertical chain minus the value created by all the players except the one in question’ (Brandenburger and Stuart 1996, 6), acknowledging that

each player shares in the value created. That is, the ability of a firm to capture value from this vertical chain depends on its ability to add positive value.

One of the advantages of adopting the value-based perspective is this clear-cut definition of value creation and appropriation (capture). The extension of the cost-revenue ratio to the 'buyer's share' (willingness-to-pay minus the price) and the 'supplier's share' (cost minus opportunity cost) highlights the role customers and suppliers have in the whole process of creating value. Having said that, the analysis of the market and unmet needs, characterisation of the business environment, precise segmentation of target customers, maintenance of a close relationship with suppliers, and constant monitoring of their performance, should all be embedded in the process.

To create added value, the firm needs to develop a favourable asymmetry to distinguish itself from its competitors, resulting either in buyers' increased willingness to pay for the firms' offerings relative to those of competitors, or in suppliers' reduced opportunity costs of contracting with the firm (Brandenburger and Stuart 1996). The firm's efforts to achieve these results constitute value-based strategies, and BMI can provide ample opportunities to pursue them. Any innovation that allows the company to deliver offerings that are more in line with customers' needs and desires should increase their (relative) willingness to pay. This is expected mainly from innovations in value proposition, value creation and value network. In turn, innovations that result in more efficient, less costly operations will increase the firm's proportion in the appropriation of value. This is more likely to be achieved with innovations in value creation, value delivery and value network. All strategies that lead to the firm's improved solidity and sustainability should represent lower risk to its suppliers, reducing their opportunity costs accordingly.

By emphasising the whole value chain, from inbound to outbound operations, the value-based perspective acknowledges that value-based strategies are not limited to capturing

financial value from product/service delivery but rather gives prominence to the whole set of activities the firm develops to create favourable asymmetries in order to capture added value.

Building upon the value-based view, and given the importance of constituting dynamics of BM in its conceptualisation, our proposed BMI framework hinges upon the five proposed BM building-blocks identified earlier, namely value creation, proposition, delivery, capture, and network, as depicted in Figure 3. In this article, we explain how each BMI element can constitute a value-based strategy that enhances value creation and value appropriation by the firm. We therefore propose a more complete and sustained framework of BMI than previously advanced models that not only incorporates the five value-based elements of BMI, but also the mutual interdependencies among the components.

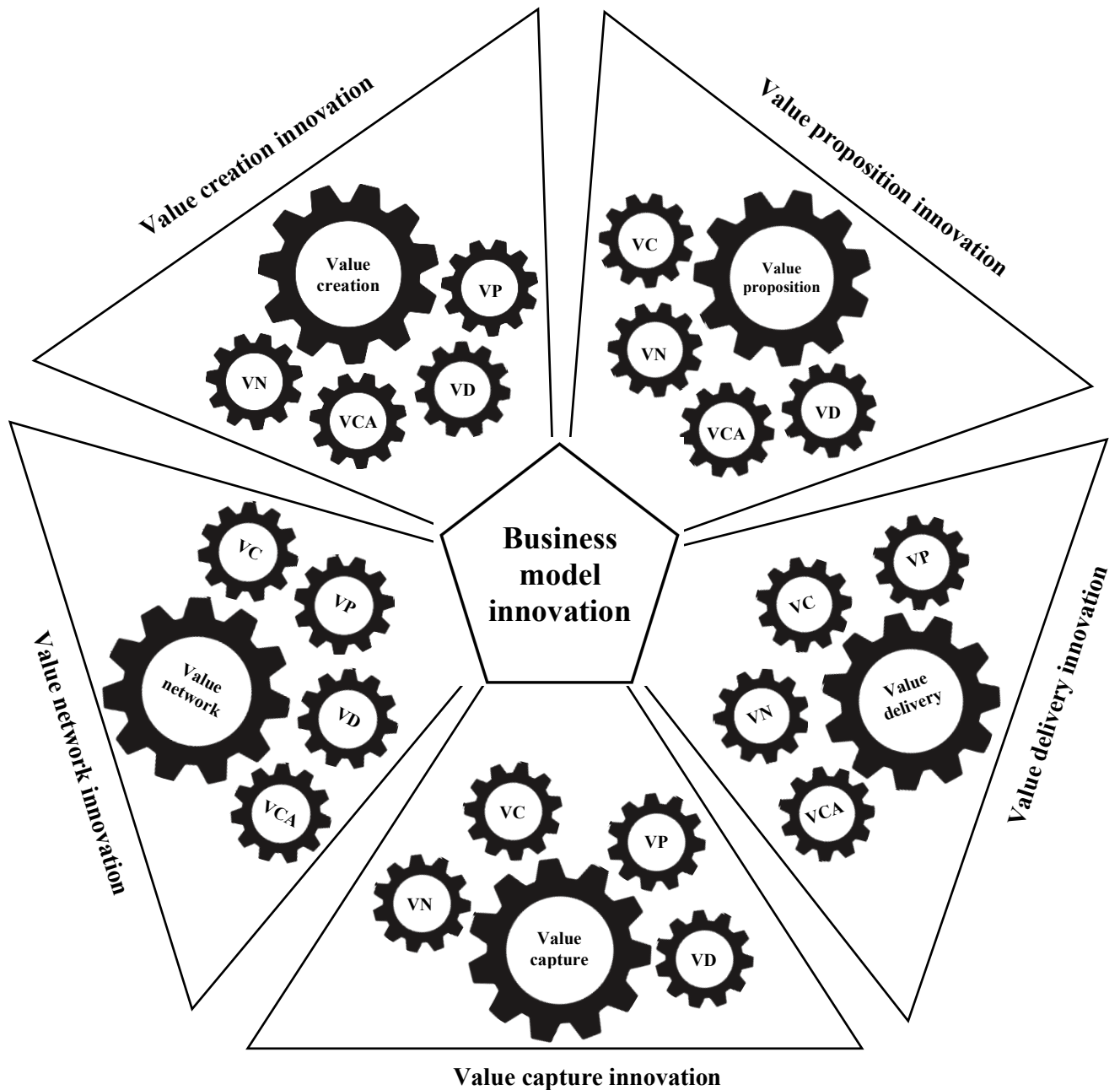


Figure 3. Value-based BMI framework

Notes: VC: value creation; VP: value proposition; VD: value delivery; VCA: value capture; VN: value network

By presenting each component of BMI separately, but interconnected with the other four, we mean both to represent the *configurational* or *transformational* approach of BMI (Demil and Lecocq 2010; Gebauer, Haldimann, and Saul 2017) and to emphasise the possible incremental nature of BMI. On the other hand, it is plausible, and even likely, that a firm puts more deliberate effort into innovating a certain element of its BM.

This does not imply that other dimensions of BM will not be affected and need also change accordingly, since each changing BM element is likely to impact the others (Demil and Lecocq 2010). But this may happen to varying degrees and not always as a result of deliberate decisions. This highlights the dynamic nature of BMI, which has remained less explored but is noted in the BMI literature (Demil and Lecocq 2010) suggesting the notion that firm sustainability relies highly upon the dynamics of BM elements' interactions, in a way that a well-defined configuration of BM components is crucial to sustainable performance. In addition to this interactional nature of BMI components, because BMI is inherently about change, its dynamic character is even more relevant and must not be ignored.

The following paragraphs are devoted to describing each of the five elements of BMI and illustrating with examples from notable companies. The configurational nature of BMI will also be explored by illustrating how changes in one BMI dimension may cause other elements to change as well.

3.1. Value creation innovation

Since the advent of e-business and the increased competition characterised by internationalisation strategies, it has been very important for companies to adjust their internal mechanisms and infrastructural dynamics to create sustained value (Amit and Zott 2001; Morris, Schindehutte, and Allen 2005). Indeed, the critical need to address BM rather than similar concepts like a business plan, comes from its effectiveness in articulating the non-financial aspects of a firm as well. Value creation is defined as the set of activities and processes by which a firm creates value for its customers and other stakeholders (Zott, Amit, and Donlevy 2000). This dimension comprises, first what is meant by 'value', and second how can it be generated, that is, how products and services are developed and produced (Amit and Zott (2001). New processes, capabilities, and technologies are proposed by Clauss (2016) as sub-constructs for measuring the value creation dimension of BMI. Value creation processes

differentiate a firm from its competitors and to achieve greater success, they should be both effective and efficient (Matzler et al. 2013). Value can be created through the reconfiguration of key resources (human, financial, or technological), and departments' tasks (Mansfield and Fourie 2004). Success in value creation innovation brings about sustained competitive advantages as this type of innovation is less likely to be duplicated than product innovation on the grounds that it occurs within the firm, making use of potentially unique resources and capabilities (Amit and Zott 2001).

From the review presented above, it can be concluded that value creation innovation verges on process innovation. As such, one way to innovate the value creation component is the introduction of new processes, mechanisms of production or technologies, as well as the development of any new resources, skills, or capabilities that are required. The advent of 3D printing technology has provided many appropriate examples illustrating value creation innovation. Boeing, the airline company, was one of the earliest to master this technology, using it to produce several parts for commercial and military planes, and is actually able to build a whole cabin through 3D printing. Ford, the auto company, started using 3D printing to make the engine cover of a new car model, saving thousands of dollars and reducing the production time from four months to four days (Gilpin 2014). This is a good example of how value creation innovations may increase the firm's added value by reducing costs with more efficient operations.

The distinguishing point between process innovation and value creation innovation, in our view, is that the reconfiguration of resources is an essential part of the latter. This requires a thorough knowledge of assets, capabilities, and resources and the vision to devise novel, more effective and/or efficient ways of combining them. This may entail re-assigning human resources to projects or activities where their skills and abilities may be utilized to greater benefit. Or redirecting financial resources to underfunded activities or to projects with greater

potential. Therefore, to reach a better configuration of resources, an effective descriptive assessment of resource allocation is necessary. Companies that have started to introduce the M2M (machine-to-machine) mechanism are good examples illustrating how a better configuration of resources can be of value. M2M systems allow the control of machines by other machines and preclude the need to use human control. This allows the company, not only to reach more clients, but more importantly, to allocate its human resources to more challenging and fruitful activities.

Value creation innovation relies heavily on the ability to read the market and have the capability to respond swiftly with valued offerings with greater potential to increase customers' willingness to pay. Smaller firms' flexibility can sometimes put them in advantage. This is the case of OPPO Electronics (Kastrenakes 2013) an unknown Chinese company, that achieved a remarkable global market share in smartphones (7.5%, compared with Apple's 14.7% - (IDC 2017) by introducing a low-priced rotating camera smartphone. This allows users to take the same high quality pictures from back and the front of the phone (for those popular selfies), precluding the need to install a second high-quality selfie camera that would considerably increase the price.

3.2. Value proposition innovation

It is straightforward to say that for a firm to obtain sustained profits, it must offer something attractive to its customers and that increases their willingness to pay. The value proposition element is about the firm's offerings (products and services) introduced either to approach its customers' problems or to satisfy their needs (Osterwalder and Pigneur 2010), as well as the intangible benefits associated with those product and services, of a more symbolic nature (Lusch and Webster Jr 2011), such as brand, image and reputation. Value propositions can be new, or already existing in the market. Accordingly, value proposition innovation can be implemented by (1) introducing completely new offerings, (2) improving, adjusting or

amplifying the existing offerings, or (3) changing the products' symbolic associations. Amazon is a vivid example of a company making the best use of the first two modes of value proposition innovations. It was pioneering by launching an online sales platform, initially selling only books. After a while, they introduced a new service, allowing users to sell their second-hand books to other users. Later, the same online sales platform was developed to diversify the range of offerings to music streaming, electronic devices, video games, dresses, groceries, apparel, furniture, and so on (Stone 2013).

The determining factors of new value propositions are identified in the literature, mainly concentrated on marketing aspects, such as design, price, convenience/usability, accessibility, brand, and the like. Flexibility in adjusting the offerings to suit different customer segments is also critical to reaching as many customers as possible. Dunkin' Donuts (coffee and baked goods chain) is a good illustrating example. Serving international markets, they have grasped cultural differences, offering unique place-based products, such as Grapefruit Coolata in South Korea, Mango Chocolate Donut in Lebanon, and Dunclairs in Russia (Fleishman 2015). Customisation takes this to the single customer level, and can be key to value proposition. The ability to change the existing products/services in order to suit the specific needs of particular customers is increasingly demanded by customers and made possible by technology. Suitable examples of customisation can be found in the apparel and accessories industry, where companies try to access as many customers as possible by offering customised products based on individual preferences of the clients. As an example, Teespring¹ provides online self-design platforms letting users design their own T-shirts. Its advertising slogans – 'Find something made for you'; 'Every product, made for you' – clearly convey the company's desire to involve users in the co-creation of value proposition.

¹ Source: <https://teespring.com>

The rebranding of the aftershave Old Spice is a good example of innovating the value proposition by changing the symbolic associations of the product. An innovative and successful advertising campaign, based on humour with an NFL player, was used to break away from the image of a cheap product for the older generation and rebranding it instead as a new ‘sexy, surprising, fun, and youthful’ line (DeMers 2016). Vodafone's takeover of Eircell (former Irish mobile cellular network provider) highlights brand value and shows how its loss was minimised by adopting a temporary double-brand strategy. Rather than dropping the notorious Eircell brand straight away, the composite ‘Eircell-Vodafone’ was chosen as the new brand, and only after about a year was the brand changed gently to Vodafone. This allowed the customers to get used to the Vodafone brand while associating it with Eircell 's positive image (Daly and Moloney 2004).

3.3. Value delivery innovation

Value delivery innovation relates to new or improved ways of reaching customers. This includes innovations in communicating with customers and in handing over the firm's offerings by gaining access to different distribution channels. Having created an offering with value to a specific market, the next challenge is how to deliver it to customers in a more effective, profitable way. Viewing customers as ‘the heart of any business model’ (Osterwalder and Pigneur 2010, 20), it is of essential importance to provide them with the ordered product/service punctually and effectively, so the effort devoted in previous stages (i.e., value creation and value proposition) will not be in vain.

Three important factors cited by scholars in delivering value are distribution channels (Stamoulis, Kanellis, and Martakos 2002; Chesbrough 2007), customer relationship management (CRM) practices (Demil and Lecocq 2010; Osterwalder and Pigneur 2010) and customer interface (Osterwalder, Pigneur, and Tucci 2005; Shafer, Smith, and Linder 2005). In addition to making the offerings physically reach customers and directing practices that

promote customer loyalty (Osterwalder and Pigneur 2010), it is also essential to ensure communication with customers, both to provide after-sales services and to obtain useful feedback that allows the company to improve its offerings and discover more appropriate delivery channels (Teece 2010).

Other authors (Rayna and Striukova 2016) consider communication as a separate BM dimension. But communicating with customers is the most important means of reaching them. To make customers aware of and interested in their offerings, companies must first and foremost communicate their value proposition (Teece 2010). In fact, communicating with customers may be pivotal to developing the value proposition itself (Dawson 2007) in such a way as to maximise customers' willingness to pay. In addition, part (if not all) of the value proposition is based on information and messages that convey to customers, not only the offerings' characteristics and advantages, but also its symbolic associations. The case of Old Spice described above illustrates this perfectly: although there is a physical product, the innovation described affected only the communication of the value proposition, allowing the firm to reach new customers with the same product. Besides, as the service economy gains pace, what some firms deliver to customers consists solely of communication and information. Such are the cases of Dropbox and Applause, presented ahead. Communicating with customers is, therefore, central to value delivery, allowing for the definition and improvement of the value proposition, as well as to its presentation to customers.

The advent of e-shopping is the classic case to illustrate this element of BMI. Internet-based selling systems have helped lots of companies reach a broader range of customers around the world at diminutive costs. Online-based companies have attained great success after launching their online deals platforms. The apparel industry has been affected considerably by customers' online purchase behaviours, particularly in recent years. Other retail sectors have also been greatly affected, with some well established companies, like department store J. C.

Penney, replacing some (or all) of their bricks-and-mortar stores with online operations (Thau 2017). Some chains, who have not adapted enough, have actually closed down altogether, as was the case of Woolworths in the UK (May 2009). Using online channels has the added advantage of facilitating communication with customers, especially in obtaining customer feedback that enables effective promotion strategies and improvements to the value proposition (Teece 2010). Amazon is well known for this.

Package-pickup service is another triumph of value delivery innovation, illustrating both a strategy that may raise customers' willingness to pay through greater convenience, and a strategy to reduce costs and increase added value. Take PostNord², the Swedish postal company, as an example. Their practical service, called 'PostNord MyPack Collect' provides customers with about 6000 shops in the Nordic region as pick-up points. This service is of major advantage for the sender, the recipient, and the shop (parcel pick-up place). First, the sender avoids extra shipment costs caused by second or more return trips in cases the recipient is not at home. Secondly, the recipient does not have to stay home waiting for the parcel to be delivered. Thirdly, the shop is given the opportunity to have new customers at their shop who might also buy their own products.

A variety of BM scholars emphasise mapping proper customer segments as an important aspect of value delivery innovation. The goal here is, not only to ensure the best fit between offerings and customers, but also to maximise the firm's added value by reaching customers with the highest willingness to pay. This implies being able to control the appropriate distribution channels. Morris, Schindehutte, and Allen (2005) assert that it is essential for a firm to take into consideration the optimum form of value delivery [i.e., business-to-business (B2B), business-to-customer (B2C), or both]; the specification of the targeted geographic market area, i.e., local, national, or overseas; and customer position in the value chain. Dell

² Source: <http://www.postnord.se/en>

Inc. is well-known for building distinct supply chains, each focused on certain customer segments, yet taking advantage of synergies created by effective configuration of its different supply chains (Simchi-Levi, Clayton, and Raven 2013). Another great example of particularly innovative value delivery is the case of the Inditex Group (Spanish clothing and fashion group) which delivers its products to separate segments of customers through its corporate-owned subsidiaries, including Zara (general clothing for men, women, and kids), Zara Home (home and decoration textile), Pull & Bear (casual wears for teenagers), Bershka (clothing for fashion-conscious teenagers), Massimo Dutti (urban styles for men and women), Stradivarius (casual wears for young women), Oysho (lingerie, and beachwear for women), and Uterqüe (accessories and leatherwear for women) (Inditex-Group 2017).

3.4. Value capture innovation

Financial aspects have always been central in measuring firms' organisational performance. That is the grounds for assigning a whole building block of BM to the economic model of a firm (Chesbrough 2007; Teece 2010). Generally speaking, the value capture element entails the way a firm makes money by appropriating its share of value creation. The sources of revenue are a focal point in defining this component of BM. However, profit maximisation can also be achieved by reducing costs. Therefore, an evaluation of the fixed and variable costs of value creation, proposition, and delivery is embedded in the value capture element. That is to say, this element of BM is directly influenced by the other elements. Value capture innovation therefore means the practices of ensuring profit growth by changing the balance of revenue and costs. Apart from the internal reallocation of funds, this can be achieved by either finding new sources of revenue and investment through creating new ways of monetising the business and attracting potential investors and financial supporters, or by decreasing the costs of creating, proposing, and delivering value (Osterwalder and Pigneur 2010).

Internal reallocation of funds can be illustrated by the above-mentioned shift of retailers from bricks-and-mortar stores to selling online. By divesting from physical shops, they can channel these funds into the online business, or otherwise to reinforce investment in new business areas. While closing over 130 apparel stores, J.C. Penney is opening 100 new home appliance showrooms and extending into home services (Thau 2017).

Considering the revenue and cost structures as the two main factors in capturing value, there are other sub-dimensions affecting the cost-revenue balance. Price strategy, for instance, plays an important role in as much as it allows the firm to push price as close as possible to customers' willingness to pay without losing sales. This may entail segmenting customers according to their willingness to pay. One innovative pricing strategy that has become a growing trend is what has become known as 'freemium' (Kumar 2014), that is, combining the offer of free products (usually more basic versions) with premium products, where customers are charged for better versions with extra and more advanced functionalities or services. Dropbox, the cloud storage platform, is a case in point: they offer a free limited storage plan and customers can upgrade to extra storage and file sharing functionalities by paying a subscription fee (Kumar 2014). Nespresso is another classic example of employing an effective price strategy, where the profit is made on a wide and varied selection of coffee capsules while selling coffee machines at low prices (Matzler et al. 2013). Adopting this 'razors-and-blades' price strategy, Nespresso persuades people into buying the low-priced coffee machines that will only work with their premium-priced coffee capsules with different flavours, which is where they make large profits.

As for access to capital, crowd-funding has become an alternative way of financing start-up projects, and platforms like Kickstarter and Indiegogo (Barnett 2013) have been created to connect entrepreneurs with business ideas to great numbers of small investors that are willing to risk small amounts of capital to back a project they find promising. A similar

way of raising funds is used by the non-profit organisation Kiva, that provides microcredit loans to (mostly) developing country borrowers by having more affluent lenders contribute as little as 25 dollars (Kiva 2017).

On the side of cost savings, any number of efficiency improvements can contribute. According to Osterwalder and Pigneur (2010), some companies perform under cost-driven BMs, paying a close attention to the sources of costs and trying to minimising them by using low-cost resources, automatic mechanisms, and outsourcing. Online order processing systems and fast turnover of stock are the other features of cost-driven BMs. IKEA saves millions by making the products ready-to-assemble. Passing on to customers the assembling activities enables IKEA to keep more stock in its self-service warehouses and consequently reduce the inventory costs, effectively transferring to customers part of the costs of the value created along the whole vertical chain. This way of streamlining costs by simplifying or reducing the company's offer to its essentials is a value capture innovation strategy common to most low-cost configurations. Of course, any process, organisational or sourcing innovation that secures greater efficiency may eventually lead to cost savings. As an example, some companies promote the use of automated solutions, to increase the production speed, improve the accuracy of manufacturing processes, and consequently boost products' quality, and cut labour costs, which all result in considerable cost reduction.

3.5. Value network innovation

BM scholars generally regard value network as a sub-factor of a specific element of BM (e.g., (Richter 2013; Ghezzi, Cortimiglia, and Frank 2015; Clauss 2016). However, inter-firm relations is seen as a foundation of the value-based approach (Chatain and Mindruta 2017). The importance of inter-organisational collaboration strategies in gaining competitive advantages is widely acknowledged in the business literature. The ability of firms to create value and innovate is highly dependent on its capacity to manage a complex network of partnerships

(Dagnino and Padula 2002; Dellyana, Simatupang, and Dhewanto 2016). As information and knowledge become key sources of competitive advantage and IT becomes pervasive, the boundaries of the firm are much more permeable and its performance less self-contained (Lusch and Webster Jr 2011) and indeed less self-constrained. In fact, more and more innovation seems to come from the ability of different firms to come together to combine and recombine their specific resources and capabilities into common projects to ‘co-create value’ for customers and other stakeholders (Lusch and Webster Jr 2011, 132).

BMI must not be restricted to internal processes. New ways of doing business can be based on new forms and structures configured around a network of partners that share activities and resources along a value-chain (Dellyana, Simatupang, and Dhewanto 2016). If the company’s BM is not open enough to embrace inter-organisational relationships with external parties, it may fail to exploit the more efficient operational configurations that lead to greater added value and to explore new market opportunities with offerings, for which, customers are more willing to pay. Effective networks and valuable partnerships facilitate the transmission of information to the company encouraging the exploration of external, upcoming opportunities. Likewise, the support from suppliers and other partners may be pivotal in exploring new opportunities in foreign markets (Freeman, Edwards, and Schroder 2006). The dynamics within such networks produce value-creating innovation, meriting specific attention.

The Spanish apparel company Zara is a case in point as it owes much of its success to its agile and flexible supply-chain that pivots around a tightly knit global network of contractors, contributing with design, manufacture and retail in a most cost-effective and responsive manner (Christopher and Lee 2004). As highlighted by Christopher and Lee (2004), this is only possible because the necessary levels of transparency and control are granted to the relevant member of the network, through accurate and timely information-sharing, thus ensuring confidence in the supply-chain.

We therefore postulate the value network as a separate element of BM, pertaining to the way a firm adopts its position within the network of partners, including suppliers, distributors, stakeholders, and the other business partners. This will include new arrangements in the network (extending or reducing the number of partners and rearranging the established relationships) and new ways of collaborating and communicating with partners (Chesbrough and Rosenbloom 2002; Morris, Schindehutte, and Allen 2005).

Making changes in both the structure and arrangements of the network of partners is key to creating and sustaining competitive advantages. Ending unproductive or even damaging relationships, and building up new partnerships with more appealing players in the market in turn, can save a company from bankruptcy. A good illustrating example can be seen in the case of the Nokia-Microsoft alliance. Crashing from the UK second super brand in 2002 to 89th in 2010 (MacIntosh and Maclean 2014), Nokia was operating on the razor's edge due to the fierce competition with emerging players in the low-cost segment as well as high-end leaders such as Apple. Hence, the CEO found a way out by prioritising its relationship with Microsoft as a particularly beneficial partner, making it possible for Nokia to introduce their own new smartphones featuring Microsoft software.

The partnership between Wal-Mart and Procter & Gamble (Kumar 1996) illustrates innovations in how partners collaborate that result in increased value for both partners and for the customers. They transformed their tense customer-supplier relationship into a valuable partnership as they started sharing real-time data on sales, inventory and prices by using an electronic-data-interchange system. This allowed them to anticipate sales and automatically manage orders. The system covers the entire order-to-delivery cycle, with invoicing and transfer of funds also processed electronically, greatly reducing costs for both parties (of inventory, human error, admin operations, stock-outs, etc.) and ensuring product availability to customers.

All of these examples highlight also that commitment to partnerships is predicated on interdependence and trust (Geyskens et al. 1996; Kumar 1996; Dagnino and Padula 2002). In line with stakeholder theory (Jones 1995), mere opportunism will not secure inter-firm collaborative efforts. Instead, genuine commitment to long-term relationships based on mutual trust and cooperation (Jones 1995) are key to the success of this element of BMI, with direct impact on suppliers' opportunity costs and overall value creation. Thus, when considering value network innovation, firms must not only build trust with their partners, but also take care not to jeopardise future collaborations by damaging trusting relationships.

3.6. Interdependencies among BMI elements

Commonly argued by scholars, investigating the relationships between BM elements is of equal importance to identifying them (Santos, Spector, and Van der Heyden 2009). As with BM, studying BMI elements while ignoring the interdependencies would be a real loss, as emphasised in the literature: 'Understanding how the elements of BMI relate and how they create value are critical as an organization adapts or changes its BM' (Giesen et al. 2010, 21). Even in cases where BMI is implemented by making changes in only one element of the BM, other elements change inevitably (Sorescu et al. 2011). As acknowledged by recent research: 'changes in one dimension are likely to cause the need for alignment in further dimensions of a firm's business model' (Spieth and Schneider 2016, 682). Building upon the 'fit theory', scholars have commonly held that a BM is not about a set of constituents working in an independent manner, but rather, how these elements *fit* together to produce synergy and added value (Sorescu et al. 2011). It is therefore an effective alignment and interaction among the components that makes a BM more successful than others. This provides grounds for the application of the 'configurational approach' to studying BMI as it takes into detailed consideration both the interplays between several attributes of a construct and holistic essence of organisational concepts (Meyer, Tsui, and Hinings 1993).

In the process of implementing BMI, where change is the defining factor as alterations are introduced to one or more components of the BM, the dynamic nature of this process comes to the forefront. The BM configuration is inevitably affected as BMI practices disturb acquired balances, especially when only some components are changed. This must be addressed in time to re-establish the required fit. On the other hand, BMI may contribute for a better fit among previously poorly adjusted BM dimensions. BMI is therefore an iterative process that requires time for internal consistency to be reached, even if the required response to the market is swifter.

Reviewing the BMI literature reveals the two main approaches used for describing the change process. First, the static approach focuses more on the change processes in the BMI elements in isolation, and second, the dynamic approach that gives more weight to the interplay between the elements throughout the change implementation process (Demil and Lecocq 2010). The latter approach is consistent with certain classifications of BM provided by previous studies (e.g., Frankenberger et al. 2013), that contradict the analysis of BM-related factors in isolation. Favouring the configurational approach, we follow the dynamic view and stress the interdependencies among BMI elements.

Evidence of the interactional effect among BMI elements can be glimpsed through some of the examples already provided in this article. Freemium pricing strategy as an innovative value capture alternative requires firms to adjust their product lines (value proposition) accordingly. In the case of PostNord, it's clear that value delivery and value network are inextricably linked. The company uses its network of partners (shops as pick-up points) to deliver parcels to customers. And Ford's example demonstrates how value creation innovation (in this case, introducing 3D printing) can impact other BMI dimensions, namely in this instance, value capture, as the new technology led to important cost savings. Indeed, value

capture benefits, in the form of increased revenue and cost savings, will be the underlying desired goal of most BMI initiatives.

The case of Applause App Quality, Inc.³ is a concrete example illustrating BMI interdependence. This web-based company provides software developers with technical feedback on their websites and mobile apps, including digital testing, usability feedback and human user experience feedback. Applause has built a global network of expert users (they announce more than 300,000 members as of 2017) that feed their databases and testing tools as well as providing market insights. Continuous testing, debugging and upgrading are essential in software development practices. They are much enhanced by the intense use afforded by extended networks. So, this service is of high value for the developers who are willing to pay for the service (from individuals to huge tech companies). And it is also of value for the testing community (suppliers) that see their opportunity costs reduced: Applause provides training and encourages interaction among community members, making it more worthwhile for them to work with Applause than on their own. So, the company offers a new high value proposition that itself relies on network value innovation, as the service provided is only possible because of the extended network of expert users they engage. They use the reviews, likes, and dislikes made by the users on the testers' reports to recruit new software expert members and extend the network. This value proposition based on value network relies also on an innovative value creation approach, as Applause has mastered the technology that enables any web-browser, any device on any operating system to become a part of the testing network. The company also has the capability of processing the information gathered to serve each customers' needs. Value capture is also innovative as Applause generates revenue from aggregating the collective contribution of a globally disperse community of software expert users and delivering it to software providers. The testing community members are paid for input that is approved by

³ Source: <https://www.applause.com>

Applause customers (with a bonus for high-value input). This is important to attract a truly global and widespread network of expert testers, while making it financially sustainable for Applause and its customers to afford the service. Finally, value delivery initiatives as the services (testing results, user reports, market insights and customer support) are all provided online, maximising the delivery speed and responsiveness, which is part of what customers appreciate in the service (value proposition).

Applause's example illustrates how the various components of the business model are intertwined and innovation on one component depends on innovation on all other components so that the whole configuration is consistent and works together.

4. Concluding remarks

Responding to recent calls for BMI elements specification (Foss and Saebi 2017; Gebauer, Haldimann, and Saul 2017), and taking the value-based view, we propose a conceptual framework identifying five value-based interdependent elements for the BMI construct.

As indicated clearly in the literature, BMI elements identification is essential to approach the definition and conceptualisation of the concept itself: 'the identification of business model innovation's relevant elements potentially leads to a better understanding of what business model innovation might imply' (Schneider and Spieth 2013, 23). To clarify how companies can innovate their BMs along these elements is a way to figure out what is BMI and how it works. The primary contribution of this study lies, therefore, in the identification of a set of value-based BMI elements: value creation innovation (new ways of creating value), value proposition innovation (new bundle of products/services), value delivery innovation (new ways to deliver the offerings to the customer), value capture innovation (new ways of customising the costs-revenue balance to maximise profits), and value network innovation (new ways to

partnership working). We detail each of these dimensions and illustrate them with examples of real-life companies.

We also argue for, and illustrate, the configurational nature of BMI, highlighting and illustrating the interdependencies among the different elements. We stress the dynamic nature of BMI, whereby inevitably, the changes in one BMI element entail changes in others, in a process that may be iterative and likely prolonged in time.

Finally, we conclude with some suggestions for future research on BMI. As an emerging area, many avenues for development are available. First and foremost, empirical studies are needed to investigate the applicability of the proposed framework. The importance and validity of the factors determining each element of BMI and how they interact require empirical confirmation, both via quantitative measures and with qualitative studies that help enlighten more specific details. A related area of research involves studying both BM and BMI typologies and taxonomies (see, for example, Baden-Fuller and Mangematin 2013; Groth and Nielsen 2015). The configurational nature of BMI, and indeed of BM, is still unexplored and the interactional effects among dimensions merit further theoretical examination and empirical testing. In the case of BMI, this requires analysing the dynamic nature of the innovation process, which seems another important avenue of research. In order to provide practical guidance to practitioners, other aspects seem relevant, such as determining factors that influence the success of BMI. The competitive environment as well as other external and internal relevant circumstances, including firm characteristics and capability profile, provide several possible variables to study. This may assist managers in considering how best to innovate the BM of their own particular company, identifying priorities and concentrating their efforts towards specific BMI dimensions, while not neglecting interactions and repercussions on the whole system.

References

- Amit, Raphael, and Christoph Zott. 2001. "Value creation in e-business." *Strategic management journal* 22 (6-7):493-520.
- Arbussa, Anna, Andrea Bikfalvi, and Pilar Marquès. 2017. "Strategic agility-driven business model renewal: the case of an SME." *Management Decision* 55 (2).
- Baden-Fuller, Charles, and Stefan Haeffliger. 2013. "Business models and technological innovation." *Long range planning* 46 (6):419-26.
- Baden-Fuller, Charles, and Vincent Mangematin. 2013. "Business models: A challenging agenda." *Strategic Organization* 11 (4):418-27.
- Baldassarre, B, G Calabretta, NMP Bocken, and T Jaskiewicz. 2017. "Bridging sustainable business model innovation and user-driven innovation: A process for sustainable value proposition design." *Journal of Cleaner Production* 147:175-86.
- Barnett, Chance. 2017. "Top 10 Crowdfunding Sites For Fundraising." Accessed July, 16. <https://www.forbes.com/sites/workday/2017/06/12/5-non-cfo-skills-cfos-need-now/#f385fb37fc7e>.
- Berends, Hans, Armand Smits, Isabelle Reymen, and Ksenia Podoynitsyna. 2016. "Learning while (re) configuring: Business model innovation processes in established firms." *Strategic Organization*:1476127016632758.
- Bonaccorsi, Andrea, Silvia Giannangeli, and Cristina Rossi. 2006. "Entry strategies under competing standards: Hybrid business models in the open source software industry." *Management Science* 52 (7):1085-98.
- Boons, Frank, and Florian Lüdeke-Freund. 2013. "Business models for sustainable innovation: state-of-the-art and steps towards a research agenda." *Journal of Cleaner Production* 45:9-19.
- Bourreau, Marc, Michel Gensollen, and François Moreau. 2012. "The impact of a radical innovation on business models: Incremental adjustments or big bang?" *Industry and Innovation* 19 (5):415-35.
- Brandenburger, Adam M, and Harborne W Stuart. 1996. "Value-based business strategy." *Journal of Economics & Management Strategy* 5 (1):5-24.
- Carayannis, Elias G, Stavros Sindakis, and Christian Walter. 2015. "Business model innovation as lever of organizational sustainability." *Journal of Technology Transfer* 40 (1):85.
- Casadesus-Masanell, Ramon, and Joan Enric Ricart. 2010. "From strategy to business models and onto tactics." *Long range planning* 43 (2):195-215.
- Casadesus-Masanell, Ramon, and Feng Zhu. 2013. "Business model innovation and competitive imitation: The case of sponsor-based business models." *Strategic management journal* 34 (4):464-82.
- Cavalcante, Sérgio, Peter Kesting, and John Ulhøi. 2011. "Business model dynamics and innovation:(re) establishing the missing linkages." *Management Decision* 49 (8):1327-42.
- Chapman, Ross L, Claudine Soosay, and Jay Kandampully. 2003. "Innovation in logistic services and the new business model: a conceptual framework." *International Journal of Physical Distribution & Logistics Management* 33 (7):630-50.
- Chatain, Olivier, and Denisa Mindruta. 2017. "Estimating value creation from revealed preferences: Application to value-based strategies." *Strategic management journal*.
- Chesbrough, Henry. 2007. "Business model innovation: it's not just about technology anymore." *Strategy & leadership* 35 (6):12-7.
- . 2010. "Business model innovation: opportunities and barriers." *Long range planning* 43 (2):354-63.
- Chesbrough, Henry, and Richard S Rosenbloom. 2002. "The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies." *Industrial and corporate change* 11 (3):529-55.
- Christopher, Martin, and Hau Lee. 2004. "Mitigating supply chain risk through improved confidence." *International Journal of Physical Distribution & Logistics Management* 34 (5):388-96.

- Chung, Walter WC, Anthony YK Yam, and Michael FS Chan. 2004. "Networked enterprise: A new business model for global sourcing." *International Journal of Production Economics* 87 (3):267-80.
- Clauss, Thomas. 2016. "Measuring business model innovation: conceptualization, scale development, and proof of performance." *R&D Management*:n/a-n/a. doi: 10.1111/radm.12186.
- Dagnino, Giovanni Battista, and Giovanna Padula. 2002. Coopetition strategy: a new kind of interfirm dynamics for value creation. Paper presented at the Innovative research in management, European Academy of Management (EURAM), second annual conference, Stockholm, May.
- Daly, Aidan, and Deirdre Moloney. 2004. "Managing corporate rebranding." *Irish Marketing Review* 17 (1/2):30.
- DaSilva, Carlos M, and Peter Trkman. 2014. "Business model: What it is and what it is not." *Long range planning* 47 (6):379-89.
- Dawson, Bradley. 2007. "The Power of the R5 Business Model." In *LTV Dynamics*, 20-4. EC&M.
- Dellyana, Dina, Togar M Simatupang, and Wawan Dhewanto. 2016. "Business Model Innovation in Different Strategic Networks." *International Journal of Business* 21 (3):191.
- DeMers, Jayson. 2017. "5 Examples Of Rebranding Done Right." Accessed July, 14. <https://www.forbes.com/sites/jaysondemers/2016/07/07/5-examples-of-rebranding-done-right/#1d8b7641385a>.
- Demil, Benoît, and Xavier Lecocq. 2010. "Business model evolution: in search of dynamic consistency." *Long range planning* 43 (2):227-46.
- Demil, Benoît, Xavier Lecocq, Joan E Ricart, and Christoph Zott. 2015. "Introduction to the SEJ special issue on business models: business models within the domain of strategic entrepreneurship." *Strategic Entrepreneurship Journal* 9 (1):1-11.
- Dervitsiotis, Kostas N. 2010. "A framework for the assessment of an organisation's innovation excellence." *Total Quality Management* 21 (9):903-18.
- Dubosson-Torbay, Magali, Alexander Osterwalder, and Yves Pigneur. 2002. "E-business model design, classification, and measurements." *Thunderbird International Business Review* 44 (1):5-23.
- Eshun Jr, Joseph P. 2009. "Business incubation as strategy." *Business Strategy Series* 10 (3):156-66.
- Fleishman, Hannah. "13 Businesses With Brilliant Global Marketing Strategies." <https://blog.hubspot.com/blog/tabid/6307/bid/33857/10-Businesses-We-Admire-for-Brilliant-Global-Marketing.aspx#sm.001sz06xq14yidcus7a1o6epqyl1g>.
- Foss, Nicolai J, and Tina Saebi. 2017. "Fifteen years of research on business model innovation: How far have we come, and where should we go?" *Journal of Management* 43 (1):200-27.
- Frankenberger, Karolin, Tobias Weiblen, Michaela Csik, and Oliver Gassmann. 2013. "The 4I-framework of business model innovation: A structured view on process phases and challenges." *International Journal of Product Development* 18 (3-4):249-73.
- Freeman, Susan, Ron Edwards, and Bill Schroder. 2006. "How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization." *Journal of International Marketing* 14 (3):33-63.
- Gambardella, Alfonso, and Anita M McGahan. 2010. "Business-model innovation: General purpose technologies and their implications for industry structure." *Long range planning* 43 (2):262-71.
- Gebauer, Heiko, Mirella Haldimann, and Caroline Jennings Saul. 2017. "Business model innovations for overcoming barriers in the base-of-the-pyramid market." *Industry and Innovation* 24 (5):543-68.
- Geyskens, Inge, Jan-Benedict EM Steenkamp, Lisa K Scheer, and Nirmalya Kumar. 1996. "The effects of trust and interdependence on relationship commitment: A trans-Atlantic study." *International Journal of research in marketing* 13 (4):303-17.
- Ghezzi, Antonio, Marcelo Nogueira Cortimiglia, and Alejandro Germán Frank. 2015. "Strategy and business model design in dynamic telecommunications industries: A study on Italian mobile network operators." *Technological Forecasting and Social Change* 90:346-54.
- Giesen, Edward, Eric Riddleberger, Richard Christner, and Ragna Bell. 2010. "When and how to innovate your business model." *Strategy & leadership* 38 (4):17-26.

- Gilpin, Lyndsey. "3D printing: 10 companies using it in ground-breaking ways." <http://www.techrepublic.com/article/3d-printing-10-companies-using-it-in-ground-breaking-ways>.
- Groth, Pernille, and Christian Nielsen. 2015. "Constructing a Business Model Taxonomy: Using statistical tools to generate a valid and reliable business model taxonomy." *Journal of Business Models* 3 (1).
- IDC. 2017. "Smartphone Vendor Market Share, 2017 Q1." IDC, Accessed July, 14. <http://www.idc.com/promo/smartphone-market-share/vendor>.
- Inditex-Group. 2017. "Inditex Group, About us, Our brands." Accessed July, 17. <https://www.inditex.com/en/about-us/our-brands>.
- Jones, Thomas M. 1995. "Instrumental stakeholder theory: A synthesis of ethics and economics." *Academy of management review* 20 (2):404-37.
- Kastrenakes, Jacob. 2017. "From Oppo to OnePlus: a new company wants to build the next great smartphone." Accessed 23 August. <https://www.theverge.com/2013/12/16/5217794/oppo-ex-vice-president-pete-lau-launches-oneplus>.
- Kiva. 2017. "About us (Kiva)." Accessed July, 16. <https://www.kiva.org/about>.
- Koen, Peter A, Heidi MJ Bertels, and Ian R Elsum. 2011. "The three faces of business model innovation: challenges for established firms." *Research-Technology Management* 54 (3):52-9.
- Kumar, Nirmalya. 1996. "The power of trust in manufacturer-retailer relationships." *Harvard business review* 74 (6):92-&.
- Kumar, Vineet. 2017. "Making "Freemium" Work." Accessed July, 16. <https://hbr.org/2014/05/making-freemium-work>.
- Linder, Marcus, and Mats Willander. 2017. "Circular business model innovation: inherent uncertainties." *Business Strategy and the Environment* 26 (2):182-96.
- Lindgren, Peter, Yariv Taran, and Harry Boer. 2010. "From single firm to network-based business model innovation." *International Journal of Entrepreneurship and Innovation Management* 12 (2):122-37.
- Lusch, Robert F, and Frederick E Webster Jr. 2011. "A stakeholder-unifying, cocreation philosophy for marketing." *Journal of Macromarketing* 31 (2):129-34.
- MacIntosh, Robert, and Donald Maclean. 2014. *Strategic management: Strategists at work*: Palgrave Macmillan.
- Magretta, Joan. 2002. "Why business models matter." *Harvard business review* 80 (5):86-92.
- Mahadevan, Balasubramaniam. 2000. "Business models for Internet-based e-commerce: An anatomy." *California management review* 42 (4):55-69.
- Mansfield, Glen Martin, and Louis CH Fourie. 2004. "Strategy and business models-strange bedfellows? A case for convergence and its evolution into strategic architecture." *South African Journal of Business Management* 35 (1):35-44.
- Markides, Constantinos. 2006. "Disruptive innovation: In need of better theory." *Journal of product innovation management* 23 (1):19-25.
- Markides, Constantinos C. 2013. "Business model innovation: what can the ambidexterity literature teach us?" *The Academy of Management Perspectives* 27 (4):313-23.
- Martins, Luis L, Violina P Rindova, and Bruce E Greenbaum. 2015. "Unlocking the hidden value of concepts: a cognitive approach to business model innovation." *Strategic Entrepreneurship Journal* 9 (1):99-117.
- Matzler, Kurt, Franz Bailom, Stephan Friedrich von den Eichen, and Thomas Kohler. 2013. "Business model innovation: coffee triumphs for Nespresso." *Journal of Business Strategy* 34 (2):30-7.
- May, Laura. 2017. "Last Woolworths stores to close." Accessed July, 16. <http://www.independent.co.uk/news/business/news/last-woolworths-stores-to-close-1228896.html>.
- Meyer, Alan D, Anne S Tsui, and C Robert Hinings. 1993. "Configurational approaches to organizational analysis." *Academy of Management journal* 36 (6):1175-95.
- Morgan, Lorraine, Joseph Feller, and Patrick Finnegan. 2013. "Exploring value networks: theorising the creation and capture of value with open source software." *European journal of information systems* 22 (5):569-88.

- Morris, Michael, Minet Schindehutte, and Jeffrey Allen. 2005. "The entrepreneur's business model: toward a unified perspective." *Journal of business research* 58 (6):726-35.
- Osterwalder, Alexander, and Yves Pigneur. 2010. *Business model generation: a handbook for visionaries, game changers, and challengers*: John Wiley & Sons.
- Osterwalder, Alexander, Yves Pigneur, and Christopher L Tucci. 2005. "Clarifying business models: Origins, present, and future of the concept." *Communications of the association for Information Systems* 16 (1):1.
- Rayna, Thierry, and Ludmila Striukova. 2016. "360° Business Model Innovation: Toward an Integrated View of Business Model Innovation: An integrated, value-based view of a business model can provide insight into potential areas for business model innovation." *Research-Technology Management* 59 (3):21-8.
- Richter, Mario. 2013. "Business model innovation for sustainable energy: German utilities and renewable energy." *Energy Policy* 62:1226-37.
- Saebi, Tina, Lasse Lien, and Nicolai J Foss. in press. "What drives business model adaptation? The impact of opportunities, threats and strategic orientation." *Long range planning*.
- Sainio, Liisa-Maija, Sami Saarenketo, Niina Nummela, and Taina Eriksson. 2011. "Value creation of an internationalizing entrepreneurial firm: The business model perspective." *Journal of Small Business and Enterprise Development* 18 (3):556-70.
- Santos, José, Bert Spector, and Ludo Van der Heyden. 2009. "Toward a theory of business model innovation within incumbent firms (Working Paper No. 16)." *Fontainebleau, France: INSEAD*.
- Schaltegger, Stefan, Florian Lüdeke-Freund, and Erik G Hansen. 2012. "Business cases for sustainability: the role of business model innovation for corporate sustainability." *International Journal of Innovation and Sustainable Development* 6 (2):95-119.
- Schneider, Sabrina, and Patrick Spieth. 2013. "Business model innovation: Towards an integrated future research agenda." *International Journal of Innovation Management* 17 (01):1-34.
- Seelos, Christian, and Johanna Mair. 2005. "Social entrepreneurship: Creating new business models to serve the poor." *Business horizons* 48 (3):241-6.
- Shafer, Scott M, H Jeff Smith, and Jane C Linder. 2005. "The power of business models." *Business horizons* 48 (3):199-207.
- Simchi-Levi, David, Annette Clayton, and Bruce Raven. 2013. "When one size does not fit all." *MIT Sloan Management Review* 54 (2):15.
- Sorescu, Alina, Ruud T Frambach, Jagdip Singh, Arvind Rangaswamy, and Cheryl Bridges. 2011. "Innovations in retail business models." *Journal of Retailing* 87:S3-S16.
- Sosna, Marc, Rosa Nelly Treviño-Rodríguez, and S Ramakrishna Velamuri. 2010. "Business model innovation through trial-and-error learning: The Naturhouse case." *Long range planning* 43 (2):383-407.
- Spieth, Patrick, Dirk Schneckenberg, and Joan E Ricart. 2014. "Business model innovation—state of the art and future challenges for the field." *R&D Management* 44 (3):237-47.
- Spieth, Patrick, and Sabrina Schneider. 2016. "Business model innovativeness: designing a formative measure for business model innovation." *Journal of business Economics* 86 (6):671-96.
- Stamoulis, Dimitrios, Panagiotis Kanellis, and Drakoulis Martakos. 2002. "An approach and model for assessing the business value of e-banking distribution channels: evaluation as communication." *International Journal of Information Management* 22 (4):247-61.
- Stone, Brad. 2013. *The everything store: Jeff Bezos and the age of Amazon*: Random House.
- Taran, Yariv, Harry Boer, and Peter Lindgren. 2015. "A business model innovation typology." *Decision Sciences* 46 (2):301-31.
- Teece, David J. 2010. "Business models, business strategy and innovation." *Long range planning* 43 (2):172-94.
- Thau, Barbara. 2017. "The Ugly (Retail) Truth: Which Stores Will Close Or Survive." Accessed July, 16. <https://www.forbes.com/sites/barbarathau/2017/03/22/the-ugly-retail-truth-a-rundown-of-store-closings-and-survival-prospects/#35e0aca25d02>.
- Timmers, Paul. 1998. "Business models for electronic markets." *Electronic markets* 8 (2):3-8.
- Wirtz, Bernd W, Adriano Pistoia, Sebastian Ullrich, and Vincent Göttel. 2016. "Business models: Origin, development and future research perspectives." *Long range planning* 49 (1):36-54.

- Witell, Lars, and Martin Löfgren. 2013. "From service for free to service for fee: business model innovation in manufacturing firms." *Journal of Service Management* 24 (5):520-33.
- Zott, Christoph, and Raphael Amit. 2007. "Business model design and the performance of entrepreneurial firms." *Organization science* 18 (2):181-99.
- . 2008. "The fit between product market strategy and business model: implications for firm performance." *Strategic management journal* 29 (1):1-26.
- . 2010. "Business model design: an activity system perspective." *Long range planning* 43 (2):216-26.
- Zott, Christoph, Raphael Amit, and Jon Donlevy. 2000. "Strategies for value creation in e-commerce:: best practice in Europe." *European Management Journal* 18 (5):463-75.

Most Recent Working Paper

NIPE WP 12/2018	Rezazadeh, Arash e Ana Carvalho , “A value-based approach to business model innovation: Defining the elements of the concept”, 2018
NIPE WP 11/2018	Carvalho, Ana e Joaquim Silva , “The Work Preferences of Portuguese Millennials - a Survey of University Students”, 2018
NIPE WP 10/2018	Sousa, Maria de Fátima e Ana Carvalho , "An Organizational Capacity model for wine cooperatives", 2018
NIPE WP 09/2018	Kurt R. Brekke, Tor Helge Holmås, Karin Monstad e Odd Rune Straume , "How does the type of remuneration affect physician behaviour? Fixed salary versus fee-for-service", 2018
NIPE WP 08/2018	Martins, Susana e Cristina Amado , "Financial Market Contagion and the Sovereign Debt Crisis: A Smooth Transition Approach", 2018
NIPE WP 07/2018	Amado, Cristina , Annastiina Silvennoinen e Timo Teräsvirta, “Models with Multiplicative Decomposition of Conditional Variances and Correlations”, 2018
NIPE WP 06/2018	Lisi, Domenico, Luigi Siciliani e Odd Rune Straume , “Hospital Competition under Pay-for-Performance: Quality, Mortality and Readmissions”, 2018
NIPE WP 05/2018	Magalhães, Pedro C. e Luís Aguiar-Conraria , “Procedural Fairness, the Economy, and Support for Political Authorities”, 2018
NIPE WP 04/2018	Aguiar-Conraria, Luís , Manuel M. F. Martins e Maria Joana Soares, “Estimating the Taylor Rule in the Time-Frequency Domain”, 2018
NIPE WP 03/2018	Sousa, Rita , Elsa Agante, João Cerejeira e Miguel Portela , “EEE fees and the WEEE system – A model of efficiency and income in European countries”, 2018
NIPE WP 02/2018	Sochirca, Elena e Francisco José Veiga , “Key determinants of elite rivalry: theoretical insights and empirical evidence”, 2018
NIPE WP 01/2018	Siciliani, Luigi e Odd Rune Straume , “Competition and Equity in Health Care Market”, 2018
NIPE WP 13/2017	Aguiar-Conraria, Luís, Maria Joana Soares e Rita Sousa , “California’s Carbon Market and Energy Prices: A Wavelet Analysis”, 2017
NIPE WP 12/2017	Mustapha Olalekan Ojo, Luís Aguiar-Conraria e Maria Joana Soares , "A time-frequency analysis of the Canadian macroeconomy and the yield curve", 2017.
NIPE WP 11/2017	Sousa, Rita , Adérito Santana e Inês Mourão, “Low-Emission Energy Outlook in a Small Island Developing States – The case of Sao Tome And Principe”, 2017
NIPE WP 10/2017	Vareiro, Laurentina, J. Cadima Ribeiro e Paula Remoaldo , “Destination attributes and tourist’s satisfaction in a cultural destination”, 2017
NIPE WP 09/2017	Amado, Cristina , Annastiina Silvennoinen e Timo Teräsvirta, "Modelling and forecasting WIG20 daily returns", 2017
NIPE WP 08/2017	Almeida, André, Hugo Figueiredo, João Cerejeira, Miguel Portela, Carla Sá e Pedro Teixeira , "Returns to Postgraduate Education in Portugal: Holding on to a Higher Ground?", 2017
NIPE WP 07/2017	Magalhães, P. e Luís Aguiar-Conraria , "Procedural Fairness and Economic Voting", 2017
NIPE WP 06/2017	Veiga, Francisco José e Linda Gonçalves Veiga , "Term limits and voter turnout", 2017
NIPE WP 05/2017	Brekke, Kurt R., Tor Helge Holmas, Karin Monstad e Odd Rune Straume , "Competition and physician behaviour: Does the competitive environment affect the propensity to issue sickness certificates?", 2017
NIPE WP 04/2017	Sochirca, Elena e Francisco José Veiga , "Measuring political rivalry and estimating its effect on economic growth", 2017
NIPE WP 03/2017	Esteves, Rosa-Branca e Sofia Cerqueira , "Behavior-Based Pricing under Imperfectly Informed Consumers", 2017
NIPE WP 02/2017	Esteves, Rosa-Branca e Joana Resende , "Personalized Pricing with Targeted Advertising: Who are the Winners?", 2017
NIPE WP 01/2017	Bohn, Frank e Francisco José Veiga , “Political Opportunism and Countercyclical Fiscal Policy in Election-year Recessions”, 2017
NIPE WP 13/2016	Bernardino, Susana, J. Freitas Santos e Sandra Fagundes , “Uma abordagem qualitativa ao papel do capital social no desenvolvimento de iniciativas sociais em Portugal”, 2016